#### Dear Parents,

Please find the attached research mini report and some links for your child to begin their research topic. As a part of our first fall research, we will be following the theme of Punkin Chunkin. This brings to the forefront three of the main devices used in the contest...but also their history. The three topics that are up for research are the catapult, the trebuchet and the cannon. Your child has drawn from a hat their proposed topic...but they have also been given the option to complete more than one research topic report. The topics were chosen by each individual student. No pressure...they chose the device they wanted to research.

# **DUE DATE: Oct. 27th, 2023**

## Step 1:

The 1st goal is completion of the research paper. PLEASE help your child find good information and help them write their first draft. Two copies of the mini research paper are attached...printable versions are on website.

Project Home page: <a href="http://mrbrantley.weebly.com/cannons-catapults-trebuchets.html">http://mrbrantley.weebly.com/cannons-catapults-trebuchets.html</a>

Images & Videos page: http://mrbrantley.weebly.com/images--videos-cannons-catapults-and-trebuchets.html

### Step 2:

The visual component. Equally important as the research writing is a visual component for each report. Past students have drawn pictures and diagrams (labeling all the parts), some have copied pages from books or magazines and added descriptors, and still others have created something 3-dimensional (models or kits) to share with the class and explain the parts of their siege device. Any visual component will count equally.

#### In Class:

#### Step 3:

Each student will use their research information and their visual component to add to a slideshow that they will create at school. We will use Google Slides (you should be able to access their account from home via Google Classroom) and each student will complete a slideshow for a final

### Ongoing:

The class will watch parts of the 2008, 2010 and 2013 Punkin Chunkin contest and a documentary by NOVA about the Medieval Trebuchet and hopefully learn from the commentary about the physics and transfer of force with each device. We will commit time in the class to work with devices I have constructed, as well as some mini constructions that the students will take part in to identify how each device works, and possibly point out their failure points.

Please assist your child with their wording in their report...sometimes the more technical terminology can be challenging for them to read while sharing in class. The students will be encouraged...but not required to share their final slideshow presentation with the classes. There are several links that I have compiled on my site in the projects section. This is a fun beginning of the year research project, and the kids are excited. I hope this carries over into their research and writing!!

# Resources for Research information:

CATAPULT:
http://en.wikipedia.org/wiki/Catapult
http://www.eurobricks.com/forum/index.php?showtopic=84677
http://www.sigmazone.com/SL/Catapult/
http://academickids.com/encyclopedia/index.php/Catapult
https://www.britannica.com/technology/catapult-military-weaponry
https://www.stormthecastle.com/catapult/the-history-of-the-catapult.htm
https://kids.kiddle.co/Catapult
TREBUCHET:
http://en.wikipedia.org/wiki/Trebuchet
http://www.trebuchet.com/
http://www.pbs.org/wgbh/nova/lostempires/trebuchet/builds.html
http://www.pbs.org/wgbh/nova/lostempires/trebuchet/trebworks.html
http://www.virtualtrebuchet.com/
http://academickids.com/encyclopedia/index.php/Trebuchet
CANNON:
http://en.wikipedia.org/wiki/Cannon
http://en.wikipedia.org/wiki/History_of_cannon
http://www.britannica.com/EBchecked/topic/92758/cannonhttp://phet.colorado.edu/sims/pr
ojectile-motion/projectile-motion_en.html
http://sci-culture.com/advancedpoll/GCSE/cannon.htm
https://phet.colorado.edu/en/simulations/projectile-motion
https://ophysics.com/k8.html
https://contrib.pbslearningmedia.org/WGBH/arct15/SimBucket/Simulations/tennisballcannon/content/index.html

Name:	Date:	
Research Project		
he topic of my research is the:		
The most significant characteristic of the		
One of the most important things I learned about the		
One of the	strengths was:	
One of the	weaknesses was:	

# Siege Device - Research Project (mini) SCORING RUBRIC

The topic of my research is the	
Visual component (ANY visual componentno extra credit for working models)	/5
The most significant characteristic of the	/5
One of the most important things I learned about the	/5
One of the strengths was	/5
One of the weaknesses or limitations was	/5
Handwriting (complete sentences, structure, grammar, penmanship)	
Comments:	/5
Total:	
	/30